



**Winston H. Hickox**  
Agency Secretary

# Air Resources Board

**Alan C. Lloyd, Ph.D.**  
Chairman

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**Gray Davis**  
Governor

Mr. Kevin Hallstrom  
Engelhard Corporation  
101 Wood Ave.  
Iselin, New Jersey 08830-0770

Reference No. RAS-02-23

Dear Mr. Hallstrom:

The California Air Resources Board (ARB) previously verified that the DPX catalyzed diesel particulate filter system reduces emissions of diesel particulate matter (PM) by 85 percent or greater (Level 3) with 1994-2001 model year engine families in on-road applications. The ARB has now reviewed your subsequent request for extending the verification of the DPX filter system to include model year 2002 engines in on-road applications. Based on its evaluation of the 2002 model year certification data, ARB hereby approves the DPX as a Level 3 diesel emission control strategy for use with diesel engines belonging to engine families listed in Attachment 1.

As in the previous verification, the approved engines do not employ exhaust gas recirculation (EGR) and were not certified new with diesel particulate filters.

The aforementioned extension of verification is valid provided the following operating criteria are met:

1. The engine must be operated with a fuel that has a sulfur content of no more than 15 parts per million by weight.
2. The average engine exhaust temperature must be at least 225 degrees Celsius.
3. The engine should be well maintained and not consume lubricating oil at a rate greater than that specified by the engine manufacturer.
4. Engelhard must install a backpressure monitor and indicator light on all vehicles retrofitted with a DPX.

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: <http://www.arb.ca.gov>.*

California Environmental Protection Agency

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Since there may be significant variations from application to application, Engelhard has indicated that it will review actual vehicle operating conditions and perform temperature datalogging prior to retrofitting a vehicle with the DPX to ensure compatibility.

The ARB estimates that the DPX will incur no discernible fuel economy penalty when used in a compatible application.

After reviewing the submitted data, the ARB does not find that the DPX filter system has an appreciable effect on overall emissions of oxides of nitrogen.

Thank you for participating in ARB's diesel emission control strategy verification program. Should you have any questions or comments, please contact Ms. Annette Hebert, Chief, Heavy-Duty Diesel In-Use Strategies Branch, at (626) 575-6973.

Sincerely,

Robert H. Cross, Chief  
Mobile Source Control Division

Attachment 1: ARB-Approved Model Year 2002 Engine Families for the Engelhard DPX particulate filter system